

**THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE  
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:**

1. An oral composition comprising:

5 an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan;  
an effective amount of an antibacterial agent, or a botanical extract, or  
both;  
an effective amount of a flavoring agent,  
an effective amount of a surfactant, and  
10 an effective amount of one, or more than one compound selected from  
the group consisting of a sweetener, a polishing agent, a thickener, a  
fluoride salt, a bleaching agent, an odour neutralizing agent, an  
antioxidant, and a gum base.

15 2. The oral composition of claim 1, further comprising a humectant.

3. An oral composition comprising:

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan;  
an effective amount of an antibacterial agent, or a botanical extract, or  
20 both;  
an effective amount of a flavoring agent;  
an effective amount of one, or more than one compound selected from  
the group consisting of a polishing agent, a thickener, a fluoride salt, a  
bleaching agent, an odour neutralizing agent, an antioxidant, and a  
25 gum base.

4. The oral composition of claim 3, further comprising one, or more than one of a  
humectant, a surfactant, and a sweetener.

5. The oral composition of claim 1, wherein the oral composition comprises:

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan;  
an effective amount of an antibacterial agent;  
an effective amount of a flavoring agent;  
an effective amount of a surfactant, and  
an effective amount of a sweetener.

6. The oral composition of claim 1, wherein the oral composition comprises:

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan;  
an effective amount of an antibacterial agent;  
an effective amount of a flavoring agent,  
an effective amount of a surfactant, and  
an effective amount of a polishing agent.

7. The oral composition of claim 1, wherein the oral composition comprises:

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan;  
an effective amount of an antibacterial agent;  
an effective amount of a flavoring agent;  
an effective amount of a surfactant;  
an effective amount of a polishing agent, and  
an effective amount of a fluoride salt.

8. The oral composition of claim 1, wherein the oral composition comprises:

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan;  
an effective amount of an antibacterial agent;  
an effective amount of a flavoring agent;  
an effective amount of a surfactant;  
an effective amount of a sweetener;  
an effective amount of a polishing agent, and  
an effective amount of a fluoride salt.

9. An oral composition comprising:

one, or more than solvent;

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan, and

an effective amount of a polishing agent.

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10. The oral composition of claim 9, further comprising an effective amount of one, or more than one compound selected from the group consisting of a sweetener, a flavoring agent, an antibacterial agent, a botanical extract, a surfactant, a humectant, a thickener, a fluoride salt, an odour neutralizing agent, an antioxidant, and a bleaching agent.

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11. An oral composition comprising:

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan, and

an effective amount of a bleaching agent.

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12. The oral composition of claim 11, further comprising an effective amount of one, or more than one compound selected from the group consisting of a flavoring agent, an antibacterial agent, a botanical extract, a surfactant, a humectant, a thickener, a fluoride salt, an odour neutralizing agent, an antioxidant, and a polishing agent.

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13. An oral composition comprising:

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan, and

an effective amount of an odour neutralizing agent.

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14. The oral composition of claim 13, further comprising an effective amount of one, or more than one compound selected from the group consisting of a flavoring agent, an antibacterial agent, a botanical extract, a surfactant, a humectant, a thickener, a fluoride salt, a bleaching agent, an antioxidant, and a polishing agent.

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15. The oral composition of claim 10, wherein the composition comprises:

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan;

an effective amount of a flavoring agent, and

an effective amount of a polishing agent.

16. The oral composition of claim 10, wherein the composition comprises:

- an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan;
- an effective amount of a flavoring agent;
- an effective amount of an antibacterial agent, and
- an effective amount of a polishing agent.

17. The oral composition of claim 12, wherein the oral composition comprises:

- an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan;
- an effective amount of a flavouring agent, and
- an effective amount of a bleaching agent.

18. The oral composition of claim 12, wherein the oral composition comprises:

- an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan;
- an effective amount of a flavouring agent;
- an effective amount of an antibacterial agent, and
- an effective amount of a bleaching agent.

19. The composition of claim 1, wherein the antibacterial agent is selected from the group consisting of triclosan, cetyl pyridinium chloride, sanguinarine, domiphen bromide, a quaternary ammonium salt, a zinc compound, a fluoride, alexidine, octonideine, EDTA, silver nitrate, thymol, methyl salicylate, eucalyptol, menthol, and a mixture thereof.

20. The oral composition of claim 1, wherein the flavoring is selected from the group consisting of a synthetic flavour, an aromatic oil, an oleo resin, a plant-derived extract, a flower-derived extract, a fruit-derived extract, and a mixture thereof.

21. The oral composition of claim 1, wherein said odour neutralizing agent is selected from the group consisting of zinc gluconate, zinc citrate, alpha ionone, and a mixture thereof.

22. The oral composition of claim 1, wherein the composition is in the form of a mouthrinse, a spray, a tablet, a lozenge, chewing gum or toothpaste.

23. The composition of claim 1, wherein the  $\beta$  (1-3)  $\beta$  (1-4) glucan is derived from a cereal grain or a part of the cereal grain.

24. The composition of claim 23, wherein the cereal is selected from the group consisting of a cultivar of barley, a cultivar of oat, a cultivar of wheat, a cultivar of rye, a cultivar of sorghum, a cultivar of millet, a cultivar of corn, and a mixture thereof.

25. An oral composition comprising:

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan;

an effective amount of an antibacterial agent selected from the group consisting of triclosan, cetyl pyridinium chloride, sanguinarine, domiphen bromide, a quaternary ammonium salt, a zinc compound, a fluoride, alexidine, octonideine, EDTA, silver nitrate, thymol, methyl salicylate, eucalyptol, menthol, and a mixture thereof.

26. The oral composition of claim 25, further comprising an effective amount of one, or more than one compound selected from the group consisting of a flavouring agent, a polishing agent, a surfactant, a botanical extract, a humectant, a thickener, a fluoride salt, a bleaching agent, a gum base, an antioxidant, and an emulsifier.

27. A method of producing fresh breath in a subject, comprising applying to the teeth, the oral cavity, or both of the subject, a composition comprising:

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan, and

an effective amount of one, or more than one of an antibacterial agent, a botanical extract, and a flavoring agent.

28. The method of claim 27, wherein the composition further comprises an effective amount of one, or more than one compound selected from the group consisting of a surfactant, a sweetener, a polishing agent, a thickener, a fluoride salt, a bleaching agent, a humectant, an odour neutralizing agent, an antioxidant, and a gum base.

29. A method of whitening the teeth of a subject, comprising applying to the teeth of the subject an oral composition comprising:

an effective amount of a  $\beta$  (1-3)  $\beta$  (1-4) glucan, and  
an effective amount of a bleaching agent.

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30. The method of claim 29, wherein the oral composition further comprises an effective amount of one, or more than one compound selected from the group consisting of a flavoring agent, an antibacterial agent, a botanical extract, a surfactant, a humectant, a thickener, a fluoride salt, an antioxidant, and a polishing agent.

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